1969

External Parasites of Swine

Cooperative Extension South Dakota State University

Historic, archived document

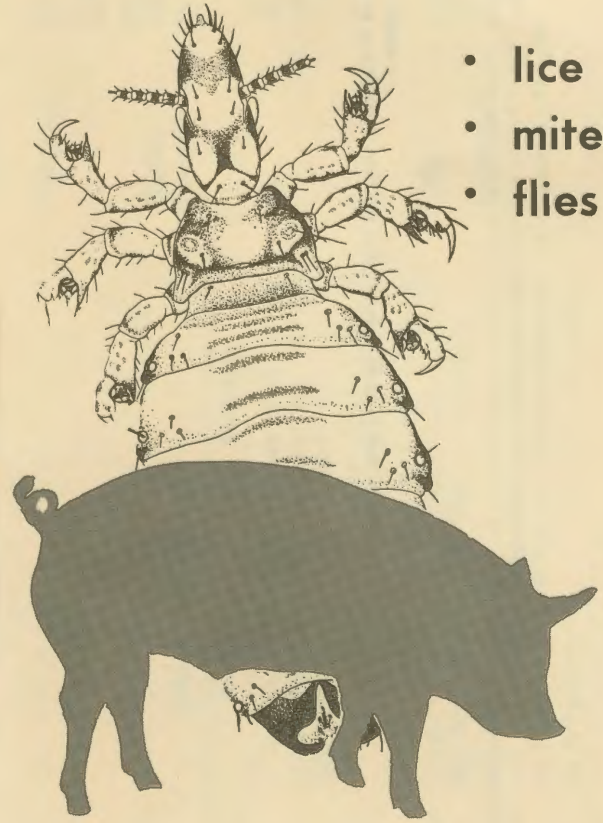
Do not assume content reflects current scientific knowledge, policies, or practices.

For current policies and practices, contact SDSU Extension

Website:	extension.sdstate.edu
Phone:	605-688-4792
Email:	sdsu.extension@sdstate.edu

FS 440

External Parasites of SWINE



- lice
- mites
- flies

COOPERATIVE EXTENSION SERVICE
SOUTH DAKOTA STATE UNIVERSITY
UNITED STATES DEPARTMENT OF AGRICULTURE

External Parasites of SWINE

- lice
- mites
- flies

Although hogs are considered hardy and healthy animals, they are attacked seriously by two external parasites, lice[1] and mange mites[2], and are troubled to varying degrees by several species of flies.

by WAYNE L. BERNDT, extension pesticides specialist;
B. H. KANTACK, extension entomologist; and
L. J. KORTAN, extension livestock specialist

HOG LICE

The hog louse is one of the largest lice attacking domestic animals. The adult female is nearly a ¼ inch long; the male is slightly smaller. The legs of the hog lice are claw-like, adapted for clinging to hairs and moving about the animal. Hog lice live in colonies, especially in winter when they tend to congregate in animals' ears, inside the legs, and in folds in the skin of the neck.

Eggs are laid by the female on the hair and take two to three weeks to hatch; the young reach maturity in about two weeks. Hog lice generally spend their entire lives on the animal except when they accidentally become dislodged.

A late-fall treatment of sprays, dips, dusts, or floor granules is prefered for louse control. It may be necessary to spray or dust a second time in 14 days if lice still are present. This can be determined by inspecting for live lice that may have hatched since the last treatment.

Lindane, malathion, or toxaphene sprays are equally effective for either lice or mange control.

MANGE MITES

Mange, sarcoptic mange, or swine itch is caused by a small, whitish mite about 1/50 inch long. The mite is so small that it nearly is invisible to the naked eye. It burrows into the skin to feed, lay eggs, and spend the major part of its life. The mites' burrowing habit causes intense itching, and pigs spend a great deal of time scratching themselves against posts, partitions, and corners of buildings.

In advanced cases of mange the skin around eyes, ears, and in the axillae of the legs becomes inflamed, thickened, and covered with small, pustular pimples. As cases advance the hair may be rubbed off in large patches, the skin becomes scaly and hangs in wrinkles or folds. Pigs that are allowed to reach this degree of infestation lose weight and may even die as a result of constant irritation by the mites, lowered vitality, and unthrifty condition.

Sarcoptic mange is contagious and spreads easily through a herd by traffic in breeding and feeder stock. Spread generally is by close contact of infested animals with clean animals. The mites and eggs also can live in bedding on the premises, making reinfestation highly probable. Contact with infested animals seems to be a principle means of spread, however.

Lindane, malathion, or toxaphene used as sprays are suggested for swine mange control. Apply to pigs at 100 to 250 p.s.i. A more thorough coverage is required for complete mange control than for louse control. Wet each hog thoroughly—make sure no animal escapes treatment.

Dust containing lindane, toxaphene, or malathion may be used when only a few animals are to be treated. Dusts generally are not as effective as sprays of the same material because of difficulty in obtaining complete coverage and proper penetration.

Dips containing lindane or lime-sulfur are recommended for mange control, although dipping is becoming less common. Large vats require correspondingly large investments in chemical. And, when water in the dipping vat becomes excessively dirty, it must be discarded and the vat refilled with a new solution.

---

[1] *Haematopinus suis* Linn
[2] *Sarcoptes scabiei* Latrielle

Rubbing devices or hog oilers are not successful in eradicating infestations of hog lice or mange mites. When hogs use the oiler, only a limited area of skin is treated—complete coverage is necessary for absolute control. In general, hog oilers have fallen into disuse in favor of other methods.

FLIES

Stable flies, normally considered as pests of cattle, are equally important pests of swine. While houseflies normally breed in wet, decaying matter, stable flies breed in barely moist, moldy straw. The adult flies have mouth parts with which they pierce the skin of animals and feed on their blood. The ears, face, and legs are principal sites of feeding; besides causing discomfort to hogs, stable flies cause a good deal of direct injury.

House flies also are a common pest in swine housing. They do not feed directly on blood or infest animals, but because of their habits they are capable of transmitting practically any communicable disease. In this sense they present a health hazard to both man and animal. House flies breed in any decaying filth, either plant or animal in origin. Poorly kept hog lots and buildings can become a fly-breeding and health problem.

The value of sanitation in fly control programs can not be over emphasized. Many times chemical control will fail as a result of the over-whelming breeding potential of flies in unclean buildings and lots. Since houseflies will breed in any moist and decaying filth, and stable flies in most straw, regular hauling and scattering of these materials will contribute greatly to fly control. When followed by chemical controls in the premises, more satisfactory control over a longer period of time will be acheived.

Table 1. Swine Mange

Insecticide	Dosage	Precautions
Lindane	2 lbs. 25% W.P. or 2 pts. 1.6 lbs. E.C. to 100 gal. water	Do not spray or dip animals less than 3 months old. Do not spray within 30 days of slaughter or dip within 60 days of slaughter.
Toxaphene	1 gal. 4 lbs. E.C. or 8 lbs. 50% W.P. to 100 gal. water	Do not spray within 28 days of slaughter.
Malathion	6½ pts. of 5 lbs. E.C. or 16 lbs. of 25% W.P. to 100 gal. water	Do not treat animals less than 1 month old. No time limitations.

Table 2. Fly Control—Premise Sprays Only

Insecticide	Dosage	Precautions
Cygon (dimethoate)	1 gal. of 2 lbs. E.C. or 8 lbs. of 25% W.P. to 25 gals. water.	Remove animals.
Diazinon	4 lbs. of 50% W.P. to 25 gals. water	Remove animals.
Korlan (ronnel)	1 gal. of 2 lbs. E.C. to 25 gals. water.	
Malathion	1 gal. of 5 lbs. E.C. or 16 lbs. of 25% W.P. to 25 gals. water.	
Rabon	4 lbs. 50% WP or 1 gal. of 2 lbs. EC to 25 gals. water	Remove animals.

Apply one to two gallons of spray to 1000 sq. ft. of wall and ceiling surface.

Do not contaminate feed, water, troughs or feeders. Cover all feed and water; cover all troughs, waterers and feeders.

Remove all animals when spraying diazinon, cygon, or Rabon; once the spray has dried they can be turned into the sheds again.

Table 3. Swine Lice Treatments

Insecticide	Dosage	Precautions
Lindane	2 lbs. 25% W.P. or 2 pts. 1.6 lbs. E.C. to 100 gals. water	Do not spray or dip animals less than 3 months old. Do not treat within 30 days of slaughter, or dip within 60 days of slaughter.
Co-Ral	8 lbs. of 25% W.P. to 100 gals. water	Do not treat animals under 3 months; at 3-6 months treat animals lightly. No time limitations.
Ciodrin	1 gal. of 2 lbs. E.C. to 100 gals. water or 1 qt. of 2 lbs. E.C. to 12 gals. water	Treat again in 14 days if needed. Apply with knapsack sprayer. Do not reapply within 7 days.
Delnav (dioxathion)	2⅔ pts. of 4 lbs. E. C. to 100 gals. of water	Do not spray or dip animals under 3 months old. Do not repeat for at least 2 weeks.
Malathion	6½ pts. of 5 lbs. E. C. or 16 lbs. of 25% W.P. to 100 gals. water	Repeat in 2-3 weeks.
Korlan (ronnel)	1½ gals. 2 lbs. E.C. to 100 gals. water	Do not reapply within 2 weeks. Do not apply within 42 days of slaughter.
	0.5 lb. of 5% granules per 100 sq. ft. of floor area as a bedding treatment.	Remove swine from treated bedding or replace bedding with untreated bedding at least two weeks before slaughter.
DDT	2 gals. 2 lbs. E.C. to 100 gals. water	
Toxaphene	1 gal. of 4 lbs. E.C. to 100 gals. water	Repeat in 2-3 weeks if needed. Do not use within 28 days of slaughter.

CAUTION

Insecticides and miticides by necessity are poisonous and are toxic to varying degrees. They do have built-in margins of safety, however; one of these is proper use. When insecticides or miticides are used properly there is virtually no danger to animals or man. But when they are used contrary to recommended practices, the margin of safety disappears.

Do not exceed the recommended dosage or concentration when using insecticides on swine. Measure spray materials carefully. Take time to read and understand the instructions and precautions on the package label.

Apply chemicals no closer to slaughter date than the time stated on the label or in the recommendations. Meat which contains more insecticide or miticide than allowed by law may be confiscated and destroyed.

When animals must be treated in the winter, there may be danger from a combination of cold weather and spraying. This may require the use of dusts or granules. If sprays must be used, treat on a warm day so pigs will have a chance to dry before night.

When hogs are treated in the summer, do not dip or spray when they are over-heated.

Do not contaminate feed or water—invert or cover all troughs, feeders, and waterers.

Observe personal precautions—when spraying inside buildings wear protective equipment. Wash thoroughly with soap and water before smoking or eating, and make a complete change of clothing when finished spraying.

Use of a tradename does not imply endorsement of one product over another.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914 in cooperation with the United States Department of Agriculture.
John T. Stone, Dean of Extension, South Dakota State University, Brookings.
5M—2-68—Replaces FS 351—File: 9.2-3—8874

Postage and Fees Paid
U. S. Department of Agriculture

COOPERATIVE EXTENSION SERVICE
U. S. DEPARTMENT OF AGRICULTURE
SOUTH DAKOTA STATE UNIVERSITY
Brookings, S. D. 57006

OFFICIAL BUSINESS
5M—2-69—8874

FS 440

External Parasites of SWINE

- lice
- mites
- flies

COOPERATIVE EXTENSION SERVICE
SOUTH DAKOTA STATE UNIVERSITY
UNITED STATES DEPARTMENT OF AGRICULTURE